Goddard Procedures and Guidelines

DIRECTIVE NO.	GPG 1410.1D	**APPROVED BY Signature:**	*Original signed by*
EFFECTIVE DATE:	10-26-01	**NAME:**	A. V. Diaz
EXPIRATION DATE:	10-26-06	**TITLE:**	Director

Responsible Office: 230/Logistics Management Division

Title: Directives Management

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PREFACE

P.1 PURPOSE

The purpose of this Goddard Procedures and Guidelines (GPG) is to establish responsibilities, procedures and guidelines for creating, processing, and maintaining Goddard directives and forms to implement the provisions of the Goddard Space Flight Center (GSFC) Quality Manual.

P.2 APPLICABILITY

This GPG applies to all Goddard Space Flight Center employees.

P.3 AUTHORITY

a. NPD 1400.1, NASA Directives System
b. NPG 1400.1, NASA Directives System Procedures and Guidelines

P.4 REFERENCES

a. NPG 1441.1, NASA Records Retention Schedules (NRRS)
b. GPG 1060.1, Management Responsibility
c. GPG 1410.2, Configuration Management
d. GPG 1440.7, Records Control
e. GPG 3410.2, Employee Training and Qualification
f. GPG 8730.3, The GSFC Quality Manual
g. GPG 1420.1, Forms Management
h. GSFC Form 3-15, Directives Comment Summary Sheet
i. GSFC Form 3-16, Goddard Policy Directive (GPD) Template
j. GSFC Form 3-17, Goddard Procedures and Guidelines (GPG) Template
k. GSFC Form 3-18, Procedures and Guidelines (PG) Template
l. GSFC Form 3-19, Work Instruction (WI) Template

P.5 CANCELLATION

GPG 1410.1C, Directives Management

P.6 SAFETY

None

P.7 TRAINING

Directorate Directives Managers (Directorate DM's) are trained by the Center Directives Manager (Center DM). All Directives Managers (DM's) and users should be familiar with the GPG 1410.1 Training Module available at http://ohr.gsfc.nasa.gov/DevGuide/ISO/home.htm. All employees should be familiar with the use of the Goddard Directives Management System (GDMS.)

P.8 RECORDS

Record Title	Record Custodian	Retention
Directive Signature Copy (GPD & GPG) and GSFC Form 3-15, Directives Comment Summary Sheet	Center Directives Manager	NRRS 1/72B Permanent - retire to FRC 5 years after cancellation or when superseded. Transfer to NARA in 5-year blocks when 20 years old.
Directive Signature Copy (PG and WI) and GSFC Form 3-15 (GSFC Form 3-15 is optional for PG's and WI's)	Office of Primary Responsibility	NRRS 1/72B

P.9 METRICS

None.

P.10 DEFINITIONS

a. Administrative Correction - A correction to a directive that does not change the substance or content of the document (e.g., typographical errors, pagination errors, etc.).

b. Approving Authority - The individual authorized to sign and approve a directive.

c. Case File – The hard copy record of a directive's review and signature. See section 1.5.

d. Center Level Directives – Directives that are designated as GPD's or GPG's. Goddard Management Instructions (GMI's) and Goddard Handbooks (GHB's) are designated as Center Level Directives until revised to meet GPD and GPG format requirements.

e. Change History Log - The Change History Log will appear as the last page of any directive, and will be maintained as a history of the change activity on that directive. An example of a Change History Log can be found at the end of this directive.

f. Controlled Document – Any document, other than a directive, that requires document control action before the document can be issued or altered in any way. Controlled documents are not a part of the GDMS. They include, but are not limited to, an organization's project plans, test plans, etc., as discussed in GPG 1410.2.

g. Controlled Version - The only correct version of a directive. It is the electronic version cited on the GDMS Master Document List and is also on the GDMS Library listings as the latest released version. This version will match the signed version in the directives Case File (see section 1.5). A copy printed from the electronic system is considered uncontrolled, although it may match the controlled version.

h. Directive - A policy, procedure and guideline, or instruction that has been approved and published by the appropriate authority. The GDMS addresses six types of directives, each of which serves a specific purpose:

(1) Goddard Management Instruction (GMI) – A policy statement that describes what is required by GSFC management to achieve NASA's vision and mission. When revised, GMI's will become either GPD's or GPG's, whichever is appropriate.

(2) Goddard Handbook (GHB) – A statement of specific, detailed procedures for implementing NASA and Goddard policies. When revised, a GHB will be become a GPG.

(3) Goddard Policy Directive (GPD) - A policy statement that describes what is required by GSFC management for achieving NASA's vision and mission.

(4) Goddard Procedures and Guidelines (GPG) - A statement of specific, detailed procedures for implementing NASA and Goddard policies.

(5) Procedures and Guidelines (PG) – A documented description of how a Goddard organization will perform its own activities.

(6) Work Instruction (WI) – A documented description of detailed activities to be carried out by that individual or group to accomplish a specific task or set of closely related tasks that affect work only within a single Primary Organization or a single lower level organization within a Primary Organization.

i. Directives Manager (DM) - The individual in an organization (Directorate, Program/Project/Office/ Division/Laboratory, Branch) that has been designated as the point of contact responsible for matters pertaining to directives management, maintenance, and review within that organization. There are three levels of Directives Managers.

(1) Center Directives Manager (Center DM) – the Directives Manager in the Logistics Management Division who has been designated as the Center's senior authority on directives matters. The Center DM manages the GDMS.

(2) Directorate-Level DM (Directorate DM) – The designated lead Directives Manager for a GSFC functional office or Directorate.

(3) Lower Level DM – An individual designated as the Directives Manager for a Program/Project/ Office/Division/Laboratory or Branch.

j. Form – A form is any document, printed or otherwise reproduced with space for filling in information. Forms are controlled according to GPG 1420.1

k. Goddard Directives Management System (GDMS) - The electronic system that maintains the collection of directives and associated forms issued by GSFC along with the procedures for establishing and maintaining such collection.

l. GDMS Forms Master List – Part of the Master Document and Forms List on GDMS, it lists the current versions of all approved Center-level forms as described in GPG 1420.1. It also lists the controlled versions of several other useful forms.

m. GDMS Library Lists – Listings of directives that include all approved versions of the directives, including pending revisions and obsolete versions. This site is only available to GSFC employees who log onto the GDMS. There are two Library listings:

(1) GPD/GPG Library – Contains GPD's, GPG's, GMI's, and lists GHB's.
(2) Directorate Libraries – Contain PG's and WI's.

n. GDMS Master Document List – Part of the Master Document and Forms List on GDMS, it lists the current versions of all signed, approved directives. It is available on the Main Menu and the Guest Menu. It includes five separate listings:

(1) GPD & GMI Master Documents List
(2) GPG & GHB Master Documents List
(3) PG Master Documents List
(4) WI Master Documents List
(5) Forms List

o. Lower-Level Directives – All directives designated as PG's and WI's.

p. NASA On-line Directives Information System (NODIS) – An Internet application that provides access to NASA directives and Center-specific directives for retrieval, viewing, and printing.

q. NASA Records Retention Schedules (NRRS) – The NASA document (NPG 1441.1) that provides instructions on the mandatory retention and disposition of records of an organization or the Agency.

r. Obsolete Version – A document that has been superseded or canceled. Obsolete versions of approved GPD's and GPG's are available in the GDMS Library listing, but do not appear on the Master Document List.

s. Primary Organization – Any organization reporting directly to the Center Director.

t. Quality Management System (QMS) – The GSFC business system that documents the methodology whereby the GSFC produces quality products.

u. Quality Management System Council (QMSC) – A group of representatives from the Directorates and Offices of the Executive Council that oversees the QMS as described in GPG 1060.1.

v. Quality Management System (QMS) Documentation – The documents that establish the implementation of GSFC roles, missions, responsibilities, and methods necessary to ensure compliance with the NASA QMS in meeting customer requirements. These documents may include NASA and GSFC directives, all documents related to the QMS such as procedures, plans, or handbooks, as well as customer and external documents to the extent specifically referenced.

w. Record – All books, papers, maps, photographs, machine readable materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government [44 U.S. Code, Chapter 33, Section 3301] and needed to document Agency activities or actions. Examples of records are: completed Work Order Authorizations (WOA's), on-the-job training (OJT) records, nonconformance reports (NCR's), and routing sheets demonstrating required review of customer agreements or contracts.

x. Record Custodian – An individual assigned responsibility for the control of records associated with that directive. See GPG 1440.7.

y. Responsible Office – The organization, identified in the header of a directive that has responsibility for the function or process described in a directive. The Responsible Office for each directive publishes and maintains the directive and the unique forms associated with the directive.

z. Retention – The length of time that records and documents are to be kept. See GPG 1440.7, Records Control and NPG 1441.1, the NASA Records Retention Schedule.

aa. Template – Similar to a form, a template establishes or serves as a pattern and instruction for producing a completed document. Templates are controlled according to GPG 1420.1. An example of a template is the electronic GPG template on GDMS.

bb. Uncontrolled Copies – Copies printed from the GDMS Master Documents List via GDMS or copies of the signed original document.

cc. User – Any person who uses or refers to any Center-level, Directorate-level, or lower-level directive during the performance of a specific task.

dd. Working Documents List – A listing on the GDMS of the directives a user can set up to support his/her function. This list is unique for each user, and shows only the latest approved version of the directives he/she chooses to list. When a directive revision is approved and released, GDMS automatically updates all Working Documents Lists that contain the previous version of the directive with the new version. GDMS also sends an electronic notification advising users when their Working Documents List has been updated. The Working Documents List can be accessed directly via a desktop "shortcut".

PROCEDURES

CHAPTER 1. Goddard Directives Management System (GDMS)

1.1 Goal

The goal of the GDMS is to provide a controlled method for initiating, reviewing, approving, distributing, revising, tracking, managing, and canceling GDMS-controlled directives, including hard copy and electronic media. These procedures and guidelines apply to Goddard Policy Directives (GPD's), Goddard Procedures and Guidelines (GPG's), and directives created at the Directorate, Program/Project/Office/Division/ Laboratory, and Branch levels. Collectively, a subset of these documents defines the GSFC Quality Management System (QMS).

Document control requirements for other documents, data, and products subject to the GSFC QMS are addressed in GPG 1410.2, Configuration Management.

1.2 Objective

The objective of directives management is to document Center policy and implementing instructions unique to GSFC, and to provide GSFC managers with the means to effectively and efficiently convey policy and instructions to employees, customers, and the public.

1.3 Responsibilities

a. Approving Authority – The Approving Authority signs and approves a directive. For GPD's and GPG's the Approving Authority is the Center Director. For lower-level directives, the Approving Authority is the head of the Responsible Office identified in the header of page one of the directive, unless otherwise specified by the head of the Primary Organization.

b. Center Directives Manager (Center DM) – The Center DM coordinates and manages the review of all Center-level directives; publishes and serves as the Record Custodian of all approved Center-level directives; controls the GDMS Directives Master Document List; serves as the point of contact for Directives Managers throughout GSFC; manages the operation of the GDMS; and chairs the GDMS Configuration Control Board (CCB). The Center DM also coordinates GSFC review of NASA directives.

c. Directives Manager (DM) - The DM assists and supports his/her organization with directives activities and issues, including ensurance that directives are prepared, reviewed, and coordinated in accordance with prescribed requirements and controls; and publishes lower-level directives for which the organization is responsible. In addition, Directorate level DM's serve as members of the GDMS Configuration Control Board.

d. Employees - Employees understand how to use the directives system, know which directives and procedures apply to their work, and follow them. When using GDMS directives, employees must verify that they are using the controlled version of a directive by checking the current revision on the GDMS Document Management List.

e. GDMS System Administrator – The GDMS System Administrator, under the direction of the Center DM, coordinates and manages the posting of documents to the GDMS database for review by designated reviewers; verifies that the document has been created using the latest version of the appropriate directive template; and posts the approved document, supplied by the responsible DM, to the GDMS. Before posting an approved directive to GDMS, the GDMS System Administrator will verify that the required approval information is present on all pages of the directive ("Original signed by" in signature block, effective date and expiration date in header, and effective date on Change History Log).

f. Initiator – The initiator prepares draft directives and revisions for which his/her organization is the Responsible Office and submits them to his/her organization's DM. The initiator also dispositions reviewer comments.

g. Labor Relations Officer – The GSFC Labor Relations Officer reviews and concurs on all final GPD's and GPG's prior to approval and signature by the Center Director.

h. Logistics Management Division – The Logistics Management Division, Code 230, manages and maintains the GDMS; assists and supports GSFC personnel in processing NASA and GSFC Center-level directives; reviews and concurs on all Center-level directives; ensures that directives are properly coordinated and that disposition of comments and nonconcurrences are adequately documented; tracks, monitors, and reports activities associated with processing directives; and designates the Center Directives Manager (Center DM) to serve as Center coordinator for carrying out these responsibilities.

i. Office of Chief Counsel - The GSFC Office of Chief Counsel provides comments upon initial Centerwide review and reviews and concurs on all final GPD's and GPG's prior to approval by the Center Director.

j. Primary Organization – The Primary Organization determines the need for directives that cover the scope of their assigned responsibilities, and designates a Responsible Office.

k. Quality Management System Council (QMSC) - The QMSC reviews all new or revised Center-level QMS directives.

l. Responsible Office – The Responsible Office for each directive publishes and maintains the directive, unique forms, and applicable training modules (see 4.1.4) associated with the directive. The DM of the Responsible Office is responsible for the processing and accuracy of each directive from this organization and for the accuracy of the GDMS records.

m. Supervisors – Supervisors ensure that the directives policy is communicated throughout their organization ensure that their employees are aware of the requirement to follow the applicable directives, and ensure they have access to those directives applicable to their work.

1.4 System Access

In order to appreciate proper operating capabilities of the GDMS, users must be operating with a current version of a JAVA-capable web browser, such as Netscape 4.0 or Internet Explorer 4.0. System access requirements are identified on the GDMS entry screen.

1.5 Case Files

When a directive is considered to be in its final form, concurrences/comments received as a result of the review process will be included in the final approval signature package as it goes forward for signature. The case file shall include documentation of all reviews conducted.

1.5.1 Center Level Directive case files, including the signed directive and GSFC Form 3-15, Directives Comment Summary Sheet, will be the official record retained by the Center DM.

1.5.2 Lower Level Directive case files, including the signed directive and pertinent back up material, will be the official record file retained by the Responsible Office or the Primary Organization. GSFC Form 3-15, Directives Comment Summary Sheet, is optional for lower level directives.

CHAPTER 2. General Procedures

2.1 Criteria for Initiating a Directive

2.1.1 If directly applicable to GSFC implementation, a relevant NASA directive shall be used without further documentation. An implementing directive shall not repeat information contained in the NASA directive, if adequately provided for in the NASA directive. Information already published and available on the subject shall be referenced, not repeated.

2.1.2 A GPD is created when it is necessary to establish Center-level policy. It is a statement of executive management conviction and intention regarding the GSFC vision and mission as depicted in its strategic implementation plan.

2.1.3 A GPG is created when the subject matter responsibilities and/or implementation affect more than one Primary Organization, where it is necessary to assign responsibilities and to provide guidelines to ensure implementation of the authority document. A GPG is a statement of specific, detailed procedures for implementing NASA and GSFC policies, necessary for establishing common approaches among Primary Organizations and not otherwise specified in NASA Procedures and Guidelines (NPG's). They set forth the GPG's purpose and scope; what shall be done and by whom; when, where, and how it shall be done; when pertinent, what resources, materials, equipment, and documents shall be used and/or produced; when pertinent, what safety considerations apply; when pertinent, what metrics apply; and how the activity shall be controlled and recorded.

2.1.4 A PG is created when the subject matter responsibilities affect work only within a single Primary Organization or in one or more lower level organizations within that Primary Organization. A PG is a documented description of how a GSFC organization will perform its own activities, and includes the PG's purpose and scope; what shall be done and by whom; when, where, and how it shall be done; when pertinent, what resources, materials, equipment, and documents shall be used; when pertinent, what safety considerations apply; and how the activity shall be controlled and recorded.

A PG is developed at the discretion of a Primary Organization or at any organizational level within the Primary Organization, and is used to implement one or more GPG's or NASA directives within an organization. Such procedure(s) may not be developed if an organization can implement the applicable directive without further clarification, and will not take exception to requirements of a higher-level

directive. A PG may not simply repeat a higher-level directive. A PG may not impose its procedures on any other organization through issuance of the PG, although other organizations may adopt as their own a PG issued by another organization. To adopt a PG issued by another organization, the adopting organization attaches a new cover sheet to the PG, assigns a new number, and obtains approval and signature from the Approving Authority.

2.1.5 A WI is created when the subject matter responsibilities affect work only within a single Primary Organization or a single lower level organization within that Primary Organization. A WI is developed to describe detailed activities to be performed to accomplish a specific task or set of closely related tasks. WI's are created only for activities that demand structured implementation and for which generic training and skills are not, in themselves, sufficient to ensure acceptable work. WI's can be forms, flowcharts, assembly procedures, inspection procedures, detailed process instructions, etc. A WI can also specify a standard or commercial document to be used to perform some work. In this case, the WI shall identify and reference the standard or commercial document and need not repeat the text.

WI's may involve operations that may have safety considerations. In these cases, safety evaluations must be performed and hazards analyzed to identify safety constraints. Instructions for creating WI's (see Section 3.4) describe the safety requirements to be addressed.

A WI may not impose its procedures on any other organization through issuance of the WI, although an organization may adopt as its own a WI issued by another individual or group. To adopt a WI issued by another organization, the adopting organization attaches a new cover sheet, assigns a new number, and obtains approval and signature from the Approving Authority.

In some cases there is a need for posting simple instructions or notices that are of such a minor or temporal nature that posting on the GDMS in any fashion is of no real value. Branch Heads have the authority to post notices at the work site without entering these notices in the GDMS. Examples include: simple safety reminders, specific facility use notices (e.g., Refrigerator or lab sink designated "For lab use only"); and guidance as to who should be contacted for general information on facilities, labs, or equipment. The Branch Head shall periodically review all posted notices and evaluate whether they should be incorporated into on-line GDMS work instructions.

2.2 Document Preparation

New directives will be prepared in MS Word using the electronic GPD, GPG, PG, and WI templates provided in GDMS. The following statement will appear at the bottom of every page of the directive as shown in the template:

CHECK THE GSFC DIRECTIVES MANAGEMENT SYSTEM AT
http://gdms.gsfc.nasa.gov/gdms **TO VERIFY THAT THIS IS THE CORRECT VERSION PRIOR TO USE.**

Revisions will be prepared using the MS Word version of the currently approved document available in the GDMS library. The initiator will prepare the revision using the latest template.

NOTE: Currently approved directives do not have to be rewritten to comply with the new templates until a new revision or revalidation is required.

2.3 Paragraph Numbering

2.3.1 Preface Outline Format

The recommended outline format for the **Preface** paragraphs in GPD's, GPG's, PG's, and WI's is as follows:

Preface
P.1
P.2
a.
b.
(1)
(a)
i.
ii. (will not exceed the Roman Numeral level)

2.3.2 Text Outline Format

The recommended outline format for the **text** of GPD's, GPG's, PG's, and WI's is as follows:

1.
1.1 Lists within a sentence are lettered as follows
a.
b.
(1)
(a)
1.2
1.2.1
1.2.1.1 (will not exceed the 4-digit number level)

2.3.3 Appendices and Attachments

Appendices and Attachments are lettered—Appendix (or Attachment) A: Title; Appendix (or Attachment) B: Title. If the directive's originator creates the appendix, it is recommended that internal paragraphs are numbered or otherwise uniquely identified using either of the methods described above. If the appendix is a document not controlled by the originator, the author's internal numbering will be accepted.

2.4 Document Numbering

Numbers will be automatically assigned by the GDMS. All directives will have an appropriate subject-classification number, based on its subject, selected from the subject-classification listing provided in NPG 1400.1. The DM will select the subject-classification number that corresponds the closest to the main subject of the directive.

2.4.1 Center-Level Document Number (GPD and GPG)

The number assigned to a directive is based on its subject matter. Directives consist of letters identifying the type of directive (GPD or GPG) followed by a 4-digit subject-classification number, a decimal point and consecutive number, and a letter indicating the sequential revision of the directive.

GPD 9999. 99Z

revision level *(A, B, etc.)*
directive number or serial
separator
subject classification *(from the Agency Filing Scheme)*
directive type *(PD or PG)*
Center *(G indicates Goddard)*

2.4.2 Lower-Level Document Number (PG's and WI's)

2.4.2.1 PG's shall be identified as ORG-PG-xxxx.y.z, where "ORG" is the highest level 3-digit organization code to which the PG or WI applies, "xxxx.y" relates to the higher level directive that is being addressed, and "z" is a sequential number to discriminate between procedures within a series.

303 PG 9999. 9. 9Z

revision level *(A, B, etc.)*
sequential number to identify procedures within a series
higher-level directive number *(if no higher-level directive, the number will appear as a zero)*
separator
subject classification *(from the Agency Filing Scheme)*
directive type *(PG or WI)*
Org *(highest level 3-digit organization)*

Example: 303-PG-8730.1.2 would be the second Code 303 document addressing GPG 8730.1, Calibration and Metrology. However, if there is no existing higher-level directive, the number will be generated based on the subject-classification code and the system will generate the number as 303-PG-8730.0.1. The zero indicates the absence of a higher-level Center directive.

Approved revisions shall be uniquely identified with an upper case letter suffix corresponding to Revision A, Revision B, etc. These suffixes will follow the last number in the numerical series.

Example: 303-PG-8730.1.2A

2.4.2.2 WI's shall be identified as ORG-WI-xxxx.y.z, where "ORG" is the highest level 3-digit organization code to which the WI applies, "xxxx.y" relates to the primary organization or lower-level PG or higher level directive that is being addressed, and "z" is a number to discriminate between procedures within a series.

Example: 303-WI-8730.1.2 would be the second Code 303 WI addressing 303-PG-8730.1, Calibration and Metrology.

Approved revisions shall be uniquely identified with an upper case letter suffix corresponding to Revision A, Revision B, etc. These suffixes will follow the last number in the numerical series.

Example: 303-WI-8730.1.2A

2.5 Effective and Expiration Dates

2.5.1 All directives shall have an effective and an expiration date. The effective date is the date the Approving Authority signs the directive. The expiration date is 5 years or less from the effective date. Prior to the expiration date, the DM must revalidate and re-initiate his/her directives, using the same process as described for initiating new directives in Chapter 4.

2.5.2 PG's and WI's previously issued without an indicated expiration date will expire 5 years from the effective date and must be revalidated or revised as indicated in paragraph 2.5.1.

2.6 Maintaining Currency of Directives

GSFC directives will be kept current with applicable Agency directives and related GSFC directives. The organization identified as the Responsible Office will be responsible for maintaining currency of the directive.

Users may not use previous/obsolete documents to perform work unless they have documented authority to do so. To ensure against use of any previous/obsolete versions of any directive, users will:

a. destroy obsolete hard copies of directives; or
b. retain library or reference copies of obsolete documents, if clearly marked, e.g., "FOR HISTORICAL PURPOSES ONLY," "FOR LIMITED APPICABILITY," "REFERENCE," etc., or
c. otherwise suitably identify (e.g., via explanation).

Documents that become obsolete without revision may be withdrawn from GDMS. In this case, the GDMS record will be retained in the GDMS Library listing and will indicate the document is canceled without replacement.

Documents that become obsolete by replacing them with other directives or controlled documents will be cancelled and replaced. In this case, the GDMS Library listing will indicate that it is replaced and cite the replacement directive or document number.

2.7 Revising Directives

When a revision is necessary, the entire directive must be reissued in accordance with the process for issuing new directives described in this GPG. Revisions to approved documents must be reviewed and approved by the function or organization that performed the initial review, or by an individual(s) designated by the Approving Authority (or designee) who has access to the pertinent data to ensure a sound decision. The Center DM will ensure that obsolete documents are removed from the GDMS Master Documents List upon their cancellation.

In the case of an "Administrative Correction", the revision is only required to be reviewed by the responsible DM. The Administrative correction will be clearly documented in the Change History Log and the corrected directive approved by the Approving Authority.

NOTE: Immediate revisions are not necessitated due to template changes or due to a title change of a referenced document or form (see 2.2). The change may be made as part of the next revision or as part of the expired directive revalidation process (see 2.5.1).

2.8 GDMS Master Document List Contents

Each Master List entry shall identify the following information:

a. document title;
b. unique document number;
c. effective date of document;
d. revision letter and revision date, if applicable;
e. initiating organization;
f. expiration date; and
g. Responsible Office

CHAPTER 3. Format

Except as specified herein, GPD's, GPG's, PG's, and WI's shall be written as described below and using the MS Word document templates, such as the one used for this page, that are available in the GDMS. GSFC forms are *not* included as part of Center-level directives (GPD's and GPG's). If a form is available in electronic format and resides on the GDMS Forms Repository, the directive should contain a hyperlink to that form. Forms currently contained in released Center-level directives will be removed the next time the directive is revised.

3.1 GPD's (see GSFC Form 3-16)

Use of the GPD template is mandatory for all GPD's created or revised after the effective date of this directive. The prescribed paragraphs for GPD's are Policy, Applicability, Authority, References, Responsibilities, Delegation of Authority, Measurement, and Cancellation. GPD's should be limited to no more than 4 pages plus an attachment for sample metrics that may be text and/or graphics, and a Change History Log.

3.2 GPG's (see GSFC Form 3-17)

Use of the GPG template is mandatory for all GPG's created or revised after the effective date of this directive. Currently approved GPG's do not have to be rewritten immediately to comply with a new template (see NOTE in 2.7).

GPG's must specify an authority document, which can be a NASA Policy Directive (NPD), a NASA Procedures and Guidelines (NPG), or a GPD. GPG's will contain a Table of Contents, when appropriate, and a Preface consisting of the following standard paragraphs. Contents beyond the Preface are at the initiator's discretion.

P.1 PURPOSE – Provide a clear statement identifying the reason or need for the directive.

P.2 APPLICABILITY -- Specify the GSFC organization(s) area, function, group, or personnel to which the directive applies. Exclusions may also be identified.

P.3 AUTHORITY – List and identify, by number and title, NASA directives or other higher-level documents that authorize the directive or mandate the need for the GPG.

P.4 REFERENCES – List and identify, by number and title, (1) all documents that are either referenced in the body of the procedure or employ the subject procedure as a reference, and (2) forms that are applicable to the implementation of the procedure. References in all directives are assumed to be the most recent approved version unless otherwise indicated.

P.5 CANCELLATION – List and identify, by number and title, (1) the previous version of the document as canceled, and (2) other documents that are canceled because they were incorporated into or replaced by the directive or revision.

P.6 SAFETY – Identify any safety requirements that apply to the execution of the GPG's requirements. If the GPG imposes safety requirements that must be addressed in lower-level procedures, these requirements should be described here.

P.7 TRAINING – Identify any training requirements associated with the implementation of the described process. If there is an applicable GPG training module located on the QMS GPG Training Site located at http://ohr.gsfc.nasa.gov/DevGuide/ISO/home.htm, refer to it here.

P.8 RECORDS – Describe all records, including forms, recommended or required to carry out the requirements of the GPG. In addition, identify, in a Records Table, all records resulting from the GPG, the record custodian(s), the record retention schedule, and associated retention period reflected in NPG 1441.1. See Preface paragraph P.8 of this directive as a sample Records Table format.

P.9 METRICS – Identify any measurements or other metrics associated with determining the effectiveness of this process to achieve planned results.

P.10 DEFINITIONS – Define only those terms unique to the activity/process being described.

PROCEDURES – Provide a detailed narrative defining the "who", "what", "when" and "how" of implementation. This section may be in the form of a narrative and/or a process flow diagram. Identify the procedure step to which safety constraints apply and identify the safety constraints applicable. Warning notes should be in **bold type**.

3.3 PG's (see GSFC Form 3-18)

Use of the PG template is mandatory for all PG's created or revised after the effective date of this directive. Currently approved PG's do not have to be rewritten immediately to comply with a new template (see NOTE in 2.7).

PG's should generally be limited to the implementation of a single process or address a single function, project or product. PG's shall contain the mandatory Preface paragraphs (P.1 through P.10) and a PROCEDURES section. Contents beyond the Preface are at the writer's discretion.

P.1 PURPOSE – Provide a clear statement identifying the reason or need for the directive.

P.2 APPLICABILITY – Specify the GSFC organization(s) area, function, group, or personnel to which the directive applies. Exclusions may also be identified.

P.3 AUTHORITY – List and identify, by number and title, Goddard directives or other higher-level documents that authorize the directive or mandate the need for the PG.

P.4 REFERENCES – List and identify, by number and title, (1) all documents that are either referenced in the body of the procedure or employ the subject procedure as a reference, and (2) forms that are applicable to the implementation of the procedure. References in all directives are assumed to be the most recent approved version unless otherwise indicated.

P.5 CANCELLATION – List and identify, by number and title, (1) the previous version of the document as canceled, and (2) other documents that are canceled because they were incorporated into or replaced by the directive or revision.

P.6 SAFETY – Identify key hazards applicable to this procedure, along with the hazard analysis tools used to identify them. Use one or more of the hazard analysis tools appropriate to this activity, such as the Task Safety Analysis or the Chemical Lab Safety Analysis tools, or equivalent, found at URL http://safety1st.gsfc.nasa.gov/. This instruction may contain a link to the completed analysis if so desired.

P.7 TRAINING – Identify any training requirements associated with the implementation of the described process.

P.8 RECORDS – Describe all records, including forms, recommended or required to carry out the requirements of the PG. In addition, identify, in a Records Table, all records and forms resulting from the PG, the record custodian(s), the record retention schedule, and associated retention period reflected in NPG 1441.1. See Preface paragraph P.8 of this directive as a sample Records Table format.

P.9 METRICS – Identify any measurements or other metrics associated with determining the effectiveness of this process to achieve planned results.

P.10 DEFINITIONS – Define only those terms unique to the activity/process being described.

PROCEDURES – Detailed narrative defining the "who", "what", "when" and "how" of implementation. This paragraph may be in the form of a narrative or a process flow diagram. Identify the procedure steps in **bold type** to which safety constraints apply, and identify the safety constraints applicable.

3.4 WI's (see GSFC Form 3-19)

Use of the WI template is mandatory for all WI's created or revised after the effective date of this directive if the WI can be reasonably written to conform to the given format. Currently approved WI's do not have to be rewritten immediately to comply with a new template (see NOTE in 2.7).
WI's shall contain the mandatory Preface paragraphs (P.1 through P.10.) followed by an INSTRUCTIONS section. Contents beyond the Preface are at the writer's discretion.

P.1 PURPOSE – Provide a clear statement identifying the reason or need for the directive.

P.2 APPLICABILITY – Specify the GSFC organization(s) area, function, group, or personnel to which the directive applies. Exclusions may also be identified.

P.3 REFERENCES – List and identify, by number and title, (1) all documents which are either referenced in the body of the procedure or employ the subject procedure as a reference, and (2) forms that are applicable to the implementation of the procedure. References in all directives are assumed to be the most recent approved version unless otherwise indicated.

P.4 CANCELLATION – List and identify, by number and title, (1) the previous version of the document as canceled, and (2) other documents that are canceled because they were incorporated into or replaced by the directive or revision.

P.5 TOOLS, EQUIPMENT, AND MATERIALS – List specific/special tools, equipment, and materials required to perform the instruction. The list shall be detailed (e.g., serial numbers, lot date codes, etc.) to the degree necessary to perform the instruction in a satisfactory manner. Clearly identify all required Personal Protective Equipment.

P.6 SAFETY PRECAUTIONS AND WARNINGS – Identify key hazards applicable to this procedure, along with the hazard analysis tools used to identify them. Use one or more of the hazard analysis tools appropriate to this activity, such as the Task Safety Analysis or the Chemical Lab Safety Analysis tools, or equivalent, found at URL http://safety1st.gsfc.nasa.gov/. This instruction may contain a link to the completed analysis if so desired.

P.7 TRAINING – Identify any training requirements associated with the implementation of the described process. Identify required QMS training as defined (see GPG 3410.2).

P.8 RECORDS – Describe all records, including forms recommended or required to carry out the requirements of the WI. In addition, identify in a Records Table, all records resulting from the WI, the record custodian(s), the record retention schedule, and associated retention period reflected in NPG 1441.1. See Preface paragraph P.8 of this directive as a sample Records Table format.

P.9 METRICS – Identify any measurements or other metrics associated with determining the effectiveness of this process to achieve planned results.

P.10 DEFINITIONS – Define only those terms unique to the activity/process being described.

INSTRUCTIONS – In a step-by-step sequence, via a narrative or a flow diagram, identify each action required to perform the task. For each step description, the following guidelines shall be considered:

- Identify special working conditions
- Identify requirements/specifications such as pressure, temperature, voltage settings, etc.
- Identify accept/reject criteria
- Identify data records or forms that must be completed
- Include aids that will help the user such as checklists, diagrams, schematics, tables, etc.
- Identify any safety concerns, warnings, or other safety notes. Identify the procedure steps to which safety constraints apply, and identify the safety constraints applicable. Clearly highlight all warning notes in **bold type**.

FLOW DIAGRAM - Include if considered an aid in understanding the instruction.

CHAPTER 4. Processing Procedures via GDMS

4.1 Processing Procedures for Center-Level Directives (GPD's and GPG's)

4.1.1 Each Primary Organization, through its DM, is responsible for designating an initiator for each draft directive for which it is designated as the Responsible Office, and for ensuring internal support to the initiator. The sequence is shown in Chapter 5. The DM may request a directorate review before submitting for Center review.

4.1.2 For Directorate Review, the DM of the Responsible Office and/or the Directorate-level DM will specify the reviewers. For Center Review, the directive is distributed to the Directorate-level DM's who may then designate additional reviewers as appropriate. In the case of QMS directives all members of the QMS Council are also reviewers.

A DM who receives notification that a draft directive is ready for review designates appropriate personnel in his/her organization as reviewers and ensures comments are posted to the GDMS.

4.1.3 Each Primary Organization shall review proposed Center-level directives, and will be given at least 10 working days to review the document and submit comments to the DM. A longer period shall be provided where the subject matter warrants.

4.1.4 Once the review period has expired, the initiator shall finalize the directive, addressing all comments. The Responsible Office is not required to accept all recommendations made during the coordination and review process. However, the Responsible Office must attempt to resolve the comments with the commenting Directorate DM. In the event that the comments cannot be resolved, the Nonconcurrence rationale must be explained in detail on GSFC Form 3-15, Directives Comment Summary Sheet.

After all Centerwide comments are addressed, the initiator prepares the final directives package (see 1.5 Case Files) which includes a hardcopy of the following: Center comments posted in GDMS, comments received via paper or email, the final draft directive, and the GSFC Form 3-15. The initiator forwards the Case File (hard copy and MS Word File) to their Directorate DM for directorate approval. The Directorate DM then forwards the Case File (hard copy and MS Word File) to the Center DM for final concurrences, including review by the Labor Relations Office and the Office of Chief Counsel, before signature by the Center Director.

It should be noted that some GPG's have an associated Training Module that is available on the training site located at http://ohr.gsfc.nasa.gov/DevGuide/ISO/home.htm. If the GPG or revision necessitates a new training module, the Responsible Office must submit an updated version of the training module to Code 114 for posting at the above URL.

4.1.5 After a new or revised Center-level directive is approved and posted, GDMS will transmit an automatic notification of the title and document number to the Directorate DM's so they may alert appropriate personnel within their organizations.

4.2 Processing Procedures for Lower-Level Directives (PG's and WI's)

4.2.1 The initiator prepares and submits a draft PG or WI through the DM for review. The initiator may form a document working group to help draft the PG or WI or provide advance comments.

4.2.2 The DM will review and approve the draft PG or WI format, and proceed with the review process, assigning appropriate personnel as reviewers. The draft PG or WI is posted for formal review and comments, unless the organization chooses to review the document outside of GDMS.

4.2.3 The initiator dispositions reviewer comments and sends the final draft PG or WI to the DM, along with the records of comments received and any additional information pertinent to the development of the final document. (See 1.5 Case Files).

4.2.4 The DM (or his/her designee) reviews the Case File and works with the initiator to resolve any remaining issues. Once all issues are resolved, the DM (or his/her designee) will recommend document approval, obtain signature from the Approving Authority, and send the MS Word file of the approved PG or WI to the GDMS System Administrator for posting and release on the GDMS.

4.3 Controlled Forms and Templates

Forms referenced in Centerwide directives are maintained on the GDMS Forms Master List. The GDMS Forms Master List also identifies the originating organization, which is the organization responsible for maintaining currency of the form with the associated GPG.

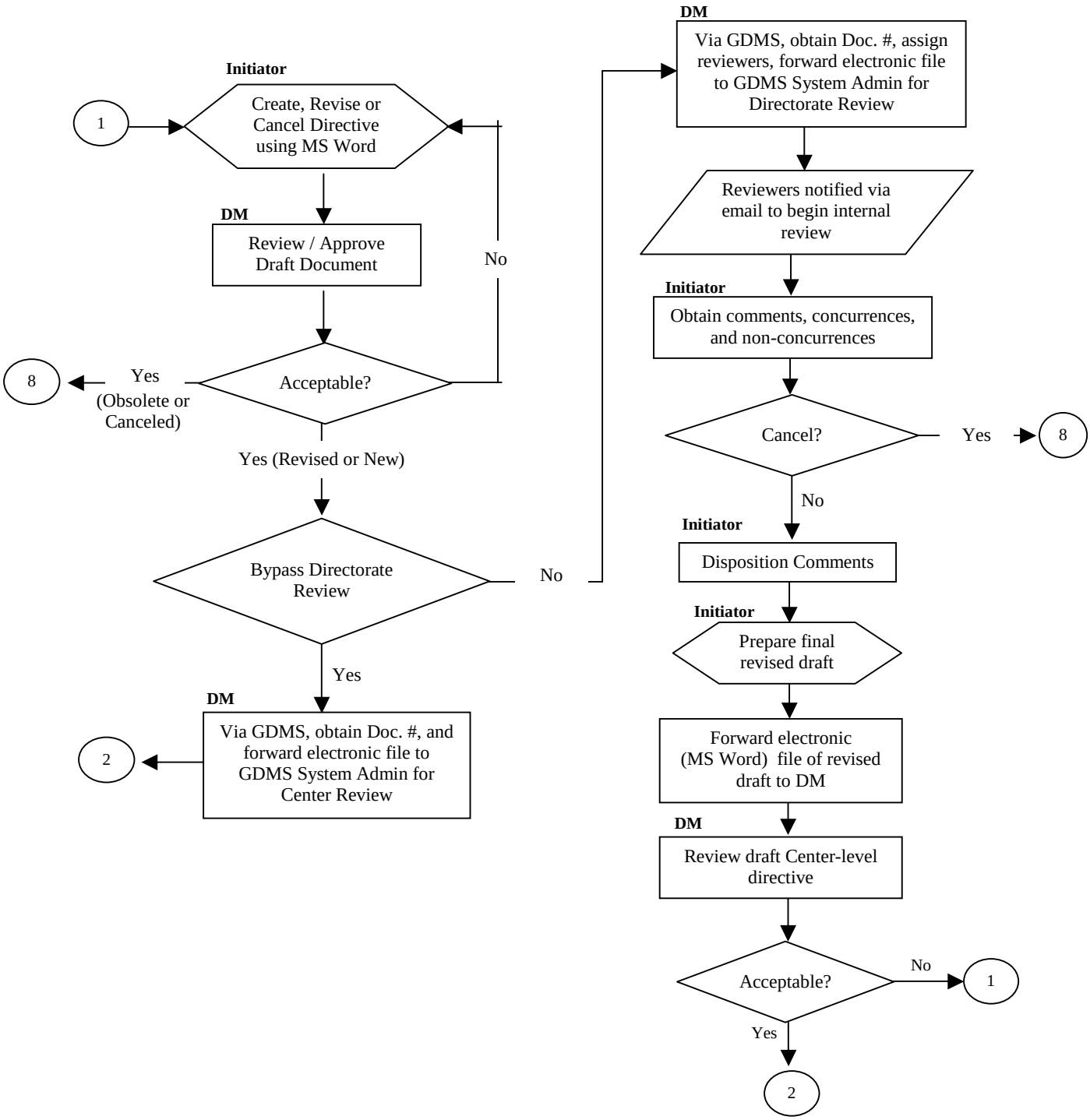
Forms will not be included as an integral part of GPG's. GPG's released after the effective date of this document will contain a hyperlink to the GDMS Forms Master List.

See GPG 1420.1, Forms Management, for guidance on controlled forms. Templates are considered to be forms and shall be controlled in the same manner as organizational forms.

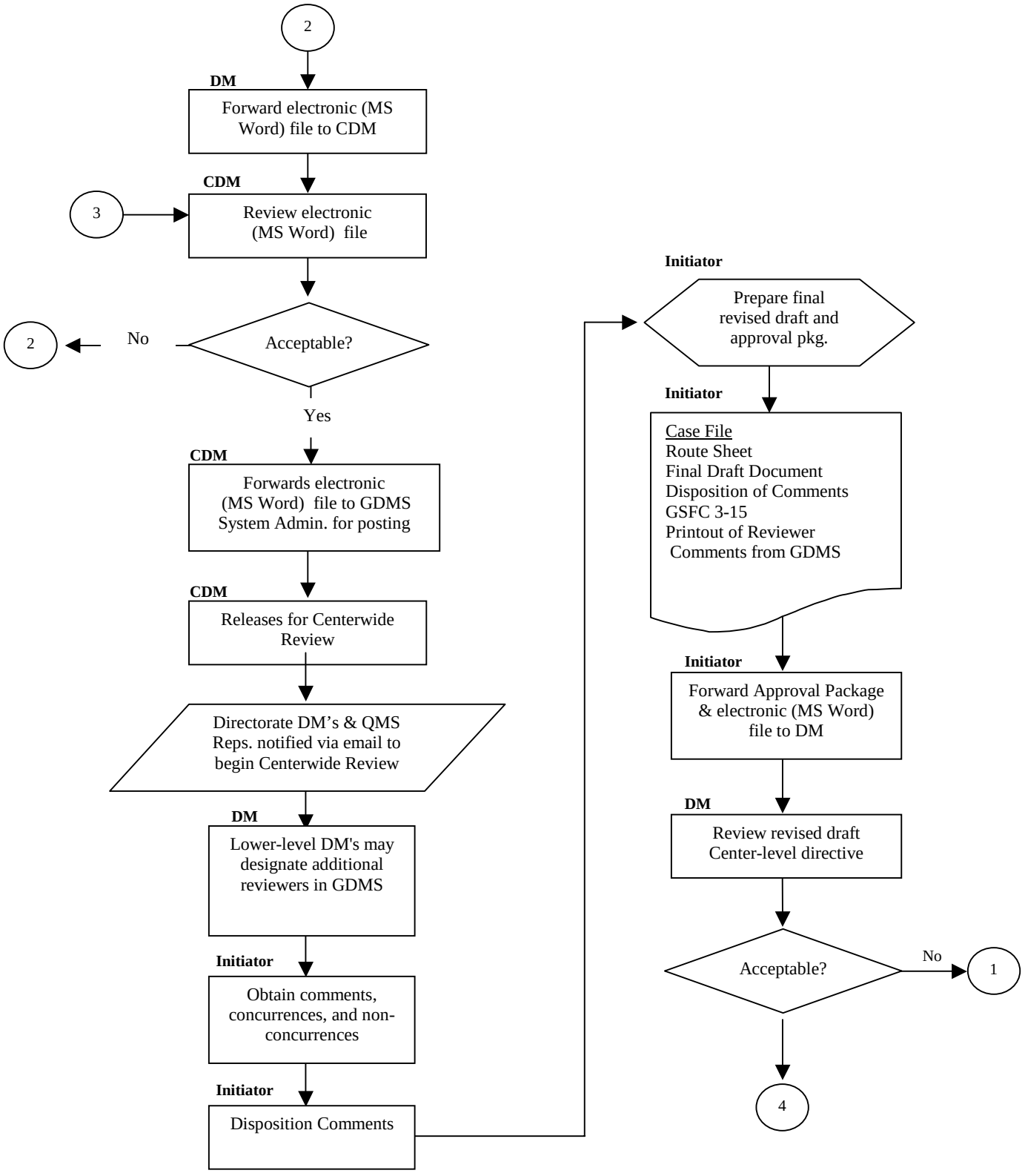
CHAPTER 5. Process Flow Diagrams

5.1 Center-level Process (GPD's and GPG's)

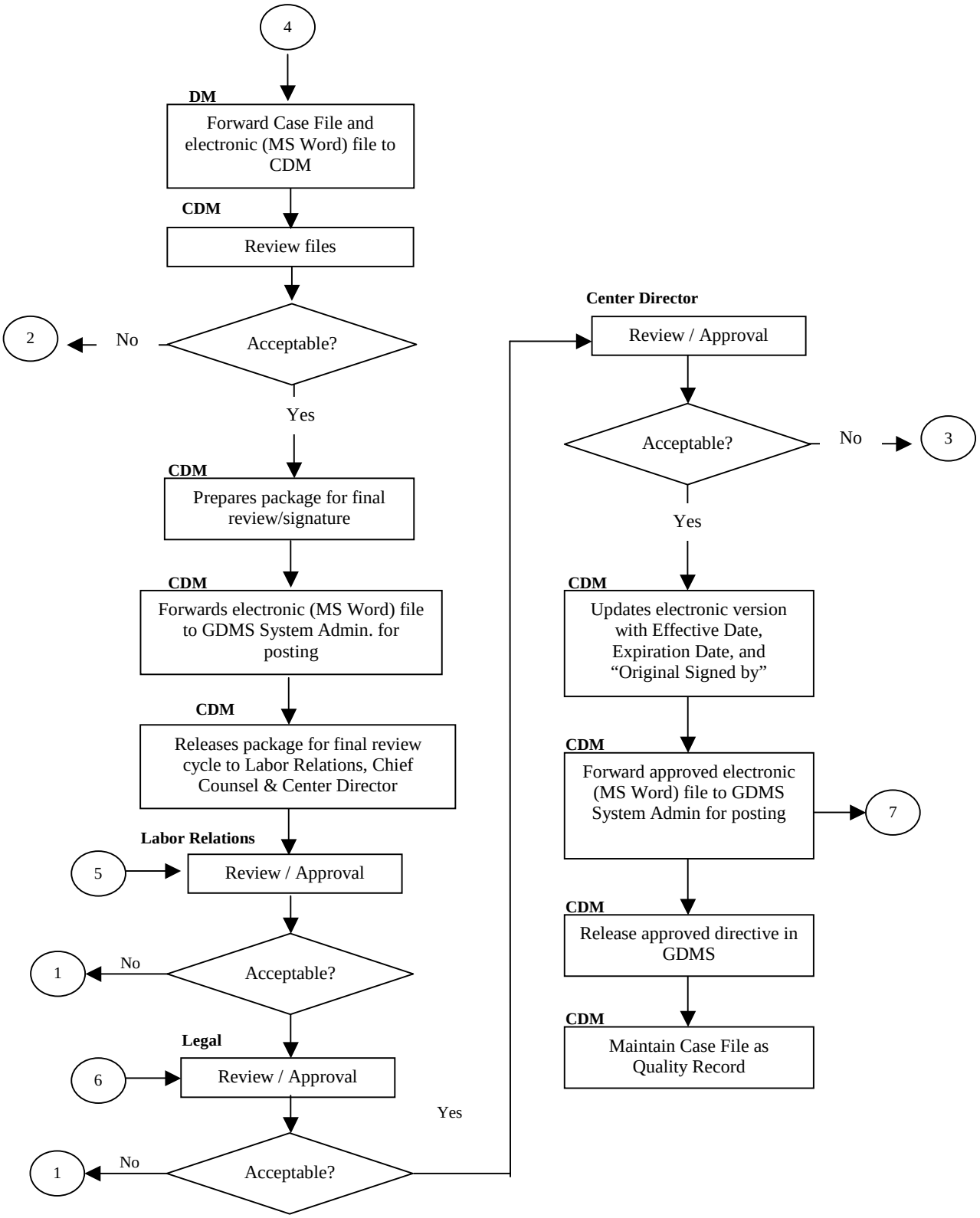
5.1.1 Directorate or Internal Review



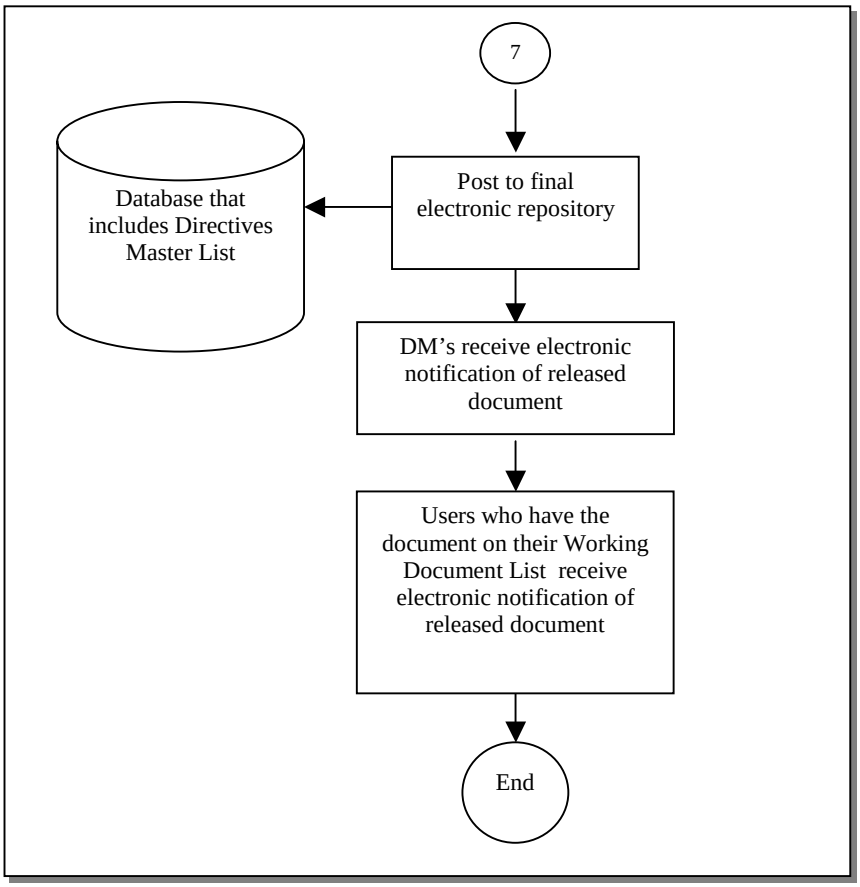
5.1.2 Centerwide Review (GPD's and GPG's)

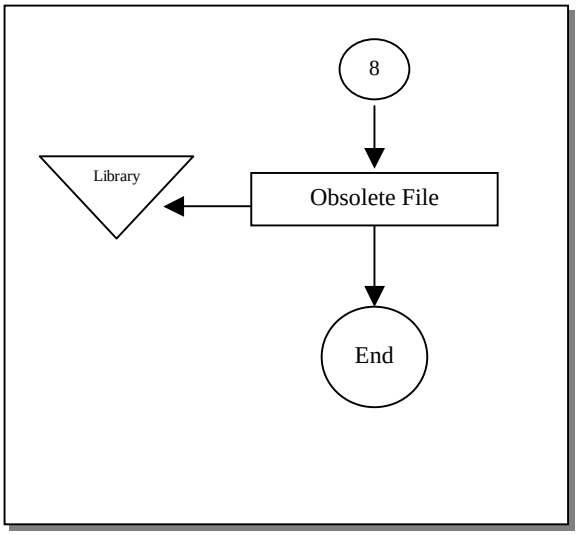


5.1.2 Centerwide Review (GPD's and GPG's) *(Continued)*

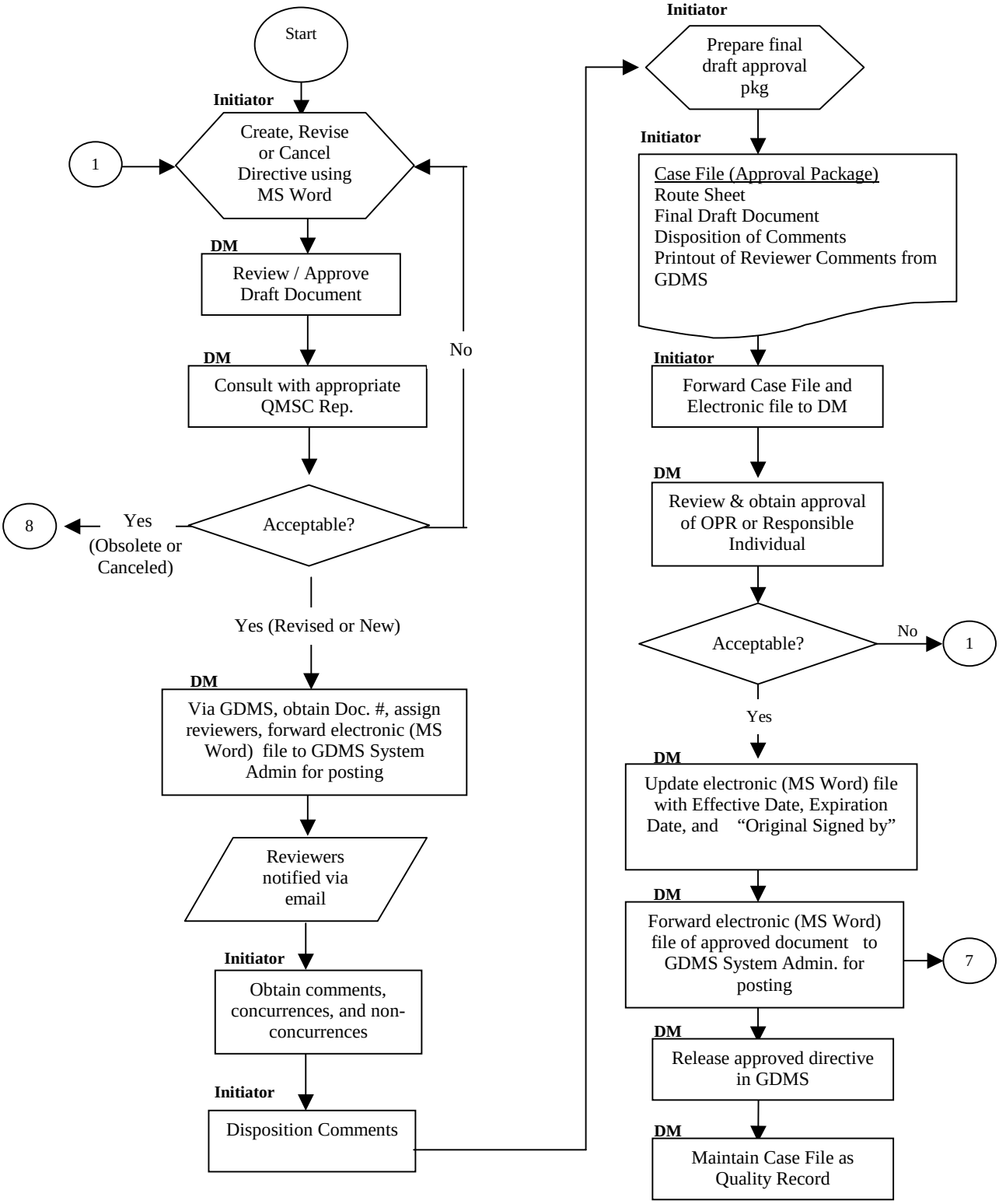


5.1.2 Centerwide Review (GPD's and GPG's) *(Continued)*

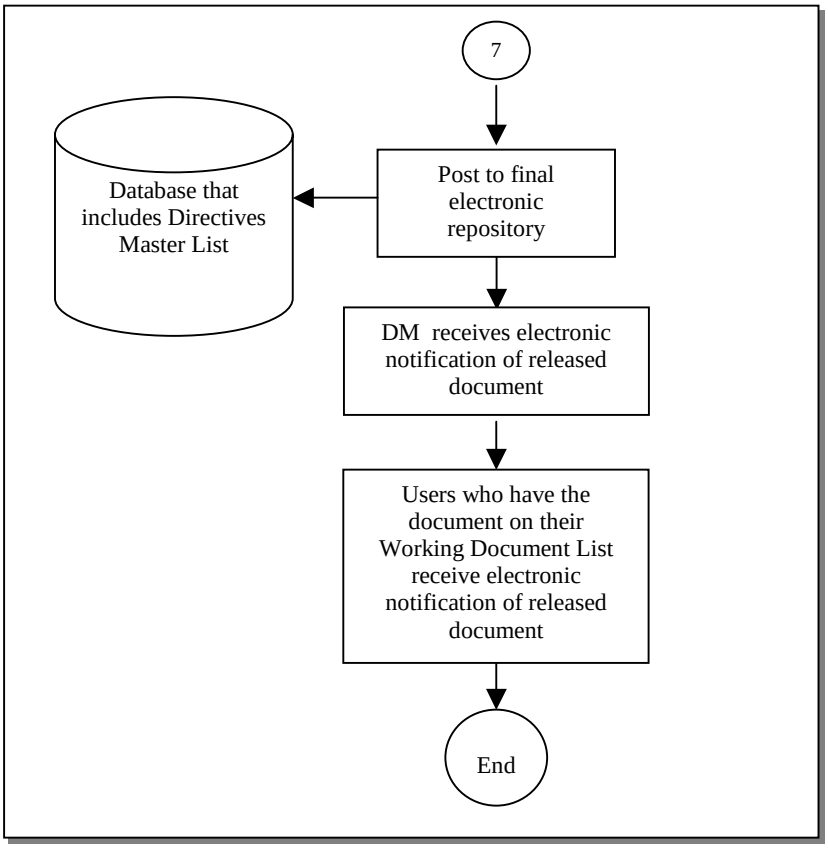


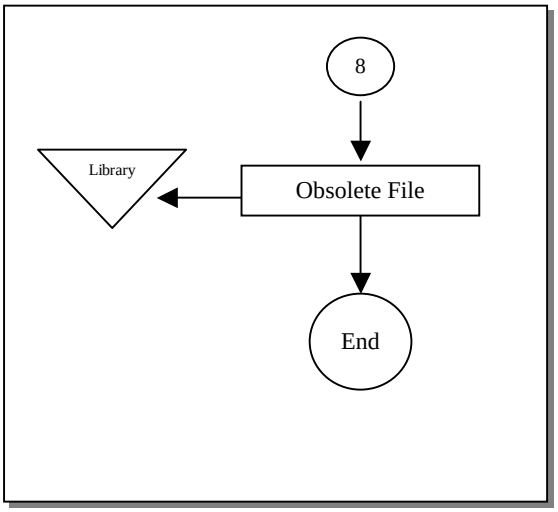


5.2 Directorate and Lower-level Process (PG's and WI's)



5.2 Directorate and Lower-level Process (PG's and WI's) *(Continued)*





APPENDIX A: Documentation Methods of Control

Document Type	Method of Control
Engineering Drawings	Documented in GPG 1410.2
External Documents/Data	Documented in GPG 1410.2
Forms and Templates	Documented in GPG 1420.1
• GSFC Official Forms Master List	GDMS Forms Master List
• Organizational Forms	Documented in GPG 1410.2
GSFC Center-level Directives (GPD's and GPG's)	GPG 1410.1
GSFC Lower-level or organizational directives (PG's and WI's)	GPG 1410.1
GSFC organizational controlled documents	GPG 1410.2

CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	0212/99	Initial Release
A	05/21/99	• TOC - P.6 added to Preface to cover quality records • P.4 – Added reference to GPG 1440.7 • P.4 -- Replaced the Quality Records definition with that contained in GPG 1440.7 • 1.3 – New definition for Quality Record Custodian • 1.3 - New definition for Quality Record Retention Period • 1.3 – Expanded definition of Directives Manager • 1.6.2 – Made GSFC Form 3-15 optional for PG's and WI's • 1.6.3 – New para to address reviews conducted outside of the GDMS. • 2.1.4 - Defined process for adapting another org's PG's or WI's • 2.1.5.1 – New paragraph to address minor or temporal notices • 3.2, P6 – Modified to identify quality record requirements. • 3.3, P.6 inserted to cover cancellations. • 3.3, P.7 inserted to cover quality records • 3.4, P.4 – Modified to identify quality record requirements. • 3.4, P.8 inserted to cover cancellations. • 4.2 – Changed approving authority for PG's and WI's from office head to Responsible Individual, expanded role of Lower Level Directives Managers • 4.3 added to cover "other document control systems"
B	08/18/99	• Modified Table of Contents to include: 2.2 Document Preparation; • Paragraph Numbering; and Chapter 5: Flow Diagrams • Modified P.6, second entry to state that the GSFC 3-15 is optional for lower-level directives (now agrees with 1.6.2) • 1.3 – Added Administrative Correction, CCB, FRC and NRRS. • 1.3p. – Expanded definition of Master Documentation List • 1.4 – Expanded CDM & DM responsibilities to cover CCB • Modified 2.2 to provide general documentation prep guidelines • Added 2.3 to address paragraph numbering • 2.8 – removed reference to "substantive and non-substantive changes" • 3.2, 3.3 & 3.4 – included explanation of what to include in the cancellation preface paragraph. • 3.2, 3.3 & 3.4 – included reference to Preface paragraph P.6 of this GPG as sample format. • Modified 3 & 4 – included various references to MS Word file • Modified 4.1.5 to requirement to send final electronic WORD document to the Center DM for posting. • Added 5.1 Center-Level Process Flow Diagram • Added 5.2 Directorate and Lower-level Process Flow Diagram • Appendix B – Removed Column III Substantive

CHANGE HISTORY LOG *Continued*

Revision	Effective Date	Description of Changes
C	04/04/00	• Changed title to read Directives Management • Changed Master *Documentation* List throughout the GPG to read GDMS Directives Master List • Remove GSFC Form 3-15 from Appendix B and change all references within the GPG to a hyperlink to the GDMS Forms Repository. • Changed Appendix C to B including all references. • Changed all occurrences to read *Quality Records* Table • Added reference to GPG 1410.2 in the TOC, 1.1, and Appendix A • Added 4.3 Forms to TOC • Modified P.1 to include reference to forms. • Added new definitions to 1.3 for Controlled Document, External Documents, Form, and Obsolete Version • Added responsibility to 1.4 for GDMS System Administrator • Modified 1.4g by removing the words “for legal propriety”. • Removed second paragraph under 2.1.5.1 • Removed second sentence from the second paragraph of 2.2 • Modified 2.3 and 2.4 to better clarify paragraph numbering and document numbering. • Modified second paragraph of 2.9 to clarify when a directive will appear on the Master Document List • Modified 2.9, item (4) to read “revision letter” • Modified Chapter 3 to include descriptions of the Preface paragraphs and removed optional from all Preface paragraphs. • Modified 3.3, second paragraph to state that a PG will have P.1 thru P.7 plus an Implementation section. • Modified 3.3 by removing the number P.8 as part of the Preface and identifying the Implementation section as part of the body of the PG. • Modified 3.4 by inserting a paragraph 3 stating that a WI will have P.1 thru P.8 plus an Instructions section. Flow diagram is optional. • Modified 3.4 by removing the number P.9 and P.10 as part of the Preface and identifying them as part of the body of the WI. • Modified 4.1 and 4.2 to include references to Case Files covered in 1.6. • Added a sentence to 4.1.1 to address internal document review process covered in Process Flow Diagram 5.1.1 • Modified 4.1.4 and 4.1.5 to clarify the resolution of comments prior to signature • Modified 4.2.5 for clarification purposes by separating into two paragraphs. Numbered the second paragraph as 4.2.6 • Deleted 4.3 GDMS vs. Existing Document Control Systems. This process is now covered by GPG 1410.2. • Inserted new 4.3 Controlled Forms • Modified numbering on Flow Diagrams • Modified 5.1.2 (last page of flow diagram) and 5.2 (last page of flow diagram) by adding the word “Library” to the triangle. • Modified the GDMS templates to comply with changes to this GPG. • Corrected Effective Date of Baseline document on Change History Log from 01/12/99 to 02/12/99

CHANGE HISTORY LOG *Continued*

Revision	Effective Date	Description of Changes
D	10-26-01	• Moved the period in the Preface numbers between Letter and number rather than after the number (e.g., P1. is now P.1) • Added new Preface paragraphs to cover Safety, Training, and Metrics. • Moved Definitions to Preface. • Modified templates (GPG, PG and WI) by rearranging Preface paragraphs and renaming for consistency. Added Safety, Training and Metrics to Preface in templates. • Deleted distinctions between "quality" records and records to comply with GPG 1440.7 • P.4 – added a new reference for GPG 1060.1, GPG 1420.1, GPG 3410.2, and GSFC Forms 3-15, 3-16, 3-17, 3-18, and 3-19. • P.8 – added definition of FRC and NRRS under table. • P.10b -- in response to NCR GDMS2000081101 changed Approving Office to Approving Authority and modified definition. • P.10 -- Modified definition Controlled Version. • P.10 -- Expanded definition for Directive to include GMI and GHB. • P.10 -- Expanded definition for Work Instruction under Directive. • P.10 -- Expanded definition of Directives Manager • P.10 -- Added new definitions for “Template” and “Working Documents List” • P.10 -- Deleted Controlled Nonelectronic Version and Correct Version. Substituted Controlled Version in their place. • P.10 -- Deleted definition for external documents. • P.10 -- Added definition for the GDMS Library List and GDMS Forms Master List. • Modified all references to GDMS Directives Master List to read GDMS Master Document List. • 1.3a – added responsibilities for Approving Authority • 1.3 – added definitions for Initiator and Responsible Office • Changed all occurrences of OPR throughout document to read “Responsible Office”. • 2.4.2.1 – modified to cover directives that have no existing Center-level directive • 2.7 Signature Authority –moved to 1.3a • Revised processing requirements in Section 4 to be consistent with Responsible Office and different levels of DM’s. • Clarified need for Directorate review of GPG’s. • Added clarification that administrative changes (i.e., Document Title and form title), do not have to be made immediately. See NOTE under 2.7. • Clarified that use of directive templates is mandatory • 4.1 and 4.2 – clarified procedures for Center-Level directives • 4.1.4 -- Added new paragraph for training module updates. • 4.3.1 – removed paragraph number • 4.3.2 – removed paragraph number and added a third sentence to reference GPG 1420.1, Forms Management • 4.3.3 thru 4.3.6.3 – deleted since it is now covered in GPG 1420.1 • Updated 5.1.1 to clarify Directorate Review Process for GPD’s and GPG’s